





PDS-5105D-MTCP

Programmable (10x RS-485) Serial-to-Ethernet Device Server with 2-port Ethernet Switch

■ Introduction

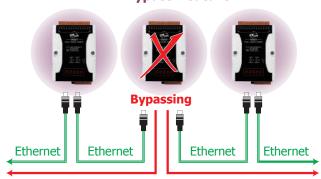
The PDS-5105D-MTCP is a family of Programmable Device Servers, also known as "Serial-to-Ethernet gateway", that are designed for linking RS-232/485 devices to an Ethernet network. The user-friendly VxComm Driver/Utility allows users to easily turn the built-in COM ports of the PDS-5105D-MTCP into standard COM ports on a PC. By virtue of its protocol independence, a small-core OS and high flexibility, the PDS-5105D-MTCP is able to meet the demands of every network-enabled application.

The PDS-5105D-MTCP includes a powerful and reliable Xserver programming structure that allows you to design your robust Ethernet applications in one day. The built-in, high-performance MiniOS7 boots the PDS-5105D-MTCP up in just one second and gives you fastest responses.

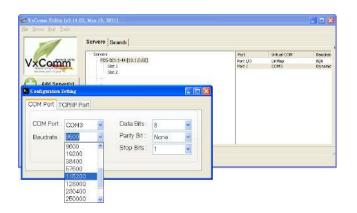
The PDS-5105D-MTCP also works as a Modbus TCP to RTU/ASCII gateway that supports most SCADA/HMI communications based on the Modbus/TCP protocol.

The PDS-5105D-MTCP is equipped with 1 RS-232/485 port and 9 RS-485 ports. The removable on-board terminal block connector is designed for easy and robust wiring in industrial situations.

LAN Bypass Feature



■ Integrates any RS-232/485 serial device in an Ethernet Network ■ "Virtual COM" Extend COM Ports ■ VxComm Utility supports 32/64-bit Windows 7 SP1/10/2012/2016 ■ Powerful Programmable Device Server ■ Watchdog Timer suitable for use in harsh environments ■ Built-in High Performance MiniOS7 from ICP DAS ■ 2-Port 10/100 Base-TX Ethernet Switch with LAN Bypass ■ Low power consumption





2-port Ethernet Switch with LAN Bypass

The PDS-5105D-MTCP is equipped with a 2-port 10/100Base-Tx Ethernet switch that simplifies network wiring by cascading Ethernet devices. Furthermore, the module features a LAN Bypass function. In cases where the module is offline due to of software, hardware or power failure, the LAN Bypass function will be automatically activated, and the essential communications on the network can continue operating without interruption.

ICP DAS CO., LTD Website: https://www.icpdas.com Vol.2022.05 1/2



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■ System Specifications

Models		PDS-5105D-MTCP
CPU		
CPU		80186, 80 MHz or compatible
SRAM		512 KB
Flash Memory		Flash ROM: 512 KB; Erase unit is one sector (64 KB); 100,000 erase/write cycles
EEPROM		16 KB; Data retention: 40 years; 1,000,000 erase/write cycles
Built-in Watchdog Timer		Yes
Communica	tion Interface	
Non-isolated	COM1	RS-232 (TxD, RxD, GND) RS-485 (Dx+, Dx-)
	COM2~COM10	, ,
Ethernet		10/100 Base-TX, RJ-45 port (Auto-negotiating, auto MDI/ MDI-X, LED indicator)
ESD		+/-2 kV
COM Port F	ormats	
Data Bit		7, 8: for COM1 and COM2 , 5, 6, 7, 8: for COM3~COM10
Parity		None, Even, Odd, Mark, Space None parity is required when using 8 data bits and 2 stop bits on COM1/COM2.
Stop Bit		1, 2: for COM1 ~ COM10
Baud Rate		115200 bps max.
LED Indicat	ors	
5-digit 7 Seg	ment	Yes
System		Red
Power		
Protection		Power Reverse Polarity Protection
Frame GND		Yes (for EMS Protection)
Input Range		+12 VDC ~ +48 VDC (non-regulated)
Power Consumption		4.8 W
Mechanical		
Casing		Fire Retardant Materials (UL94-V0 Level)
Dimensions (W x L x H)		91 mm x 52 mm x 131 mm
Installation		DIN-Rail mounting
Environmer	nt	
Operating Temperature		-25 °C ~ +75 °C
Storage Temperature		-30 °C ~ +80 °C
Humidity		10 ~ 90% RH, non-condensing

Ordering Information

	Programmable (10x RS-485) Serial-
DDC E40ED MECD CD	to-Ethernet Device Server with 2-port
PDS-5105D-MTCP CR	Ethernet Switch, Modbus Gateway
	and LED Display (RoHS)

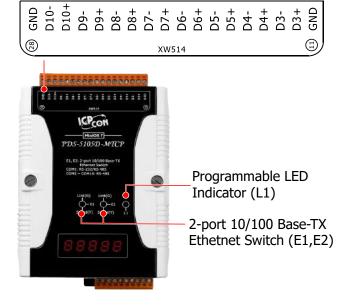
Accessories

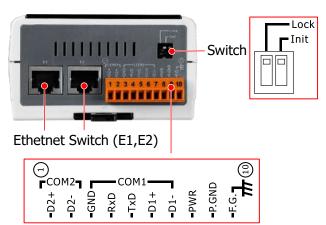
CA-0903 CR	DB9 Female to 5-wire Cable [RS-232], 30cm (RoHS)
CA-0910 CR	DB9 Female to 3-wire Cable [RS-232; Pin2, Pin3 and Pin5], 1M (RoHS)
NS-205 CR	Unmanaged 5-port Industrial Ethernet Switch (RoHS)

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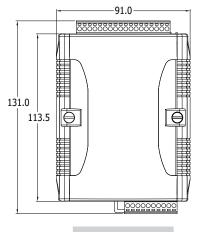
Appearances

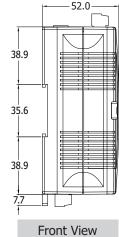






■ Dimensions (Units: mm)





Left Side View